

# Work Order ID 64414

Monday, December 06, 2010 8:17:10 AM



Page 1

|                           |                  |  |               |       |  |
|---------------------------|------------------|--|---------------|-------|--|
| Item ID: D3646-3          | Accept           |  | Setup         | Start |  |
| Revision ID:              |                  |  |               | Stop  |  |
| Item Name: Arm            |                  |  |               |       |  |
| Start Date: 12/6/2010     | Start Qty: 10.00 |  | Cust Item ID: |       |  |
| Required Date: 12/13/2010 | Req'd Qty: 10.00 |  | Customer:     |       |  |
| Reference:                |                  |  |               |       |  |

|            |                         |                      |            |       |     |       |  |
|------------|-------------------------|----------------------|------------|-------|-----|-------|--|
| Approvals: | Process Plan: <u>PL</u> | Date: <u>10-12-6</u> | Tooling:   | Date: | Run | Start |  |
|            | QC:                     | Date:                | SPC (Y/N): | Date: |     | Stop  |  |

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr                   |
|----------|--------------------------------|
| D3646    | Rev <u>A</u> <u>B</u> <u>C</u> |

|          |          |      |  |  |  |  |  |  |  |
|----------|----------|------|--|--|--|--|--|--|--|
| 100      | NC BRAKE | 0.00 |  |  |  |  |  |  |  |
|          | Brake NC | 0.00 |  |  |  |  |  |  |  |
| Brake NC | Memo     |      |  |  |  |  |  |  |  |

1-Punch to length as per Dwg D3646 & template DT8959 \* Dwg as chg'd DT8959 might not be right. 7m 10/12/13

|           |           |      |  |  |  |  |  |  |  |
|-----------|-----------|------|--|--|--|--|--|--|--|
| 110       | Small Fab | 0.00 |  |  |  |  |  |  |  |
|           | Small Fab | 0.00 |  |  |  |  |  |  |  |
| Small Fab | Memo      |      |  |  |  |  |  |  |  |

1-Deburr 2- Bend as per dwg D3646 7m 10/12/13

|                 |   |      |  |  |  |  |  |  |  |
|-----------------|---|------|--|--|--|--|--|--|--|
| 120             | QC5- Inspect part completeness to step on W/O | 0.00 |  |  |  |  |  |  |  |
|                 | QC  | 0.00 |  |  |  |  |  |  |  |
| Quality Control | Memo  |      |  |  |  |  |  |  |  |

DT8959 is good. the - 3 Day. Didnt change. 10/12/14

(10X)

(10X)

(x10)

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
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| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

**Work Order ID 64414**

Monday, December 06, 2010 8:17:10 AM

Page 3

Item ID: D3646-3

Accept

Setup Start

Revision ID:

Stop

Item Name: Arm

Start Date: 12/6/2010 Start Qty: 10.00

Cust Item ID:

Required Date: 12/13/2010 Req'd Qty: 10.00

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

| Sequence ID/<br>Work Center ID | Operation<br>Description                    | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 160                            | QC21- Final Inspection - Work Order Release | 0.00                 |         |        |              |               |               |                  |                |
| QC                             | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |   |                      |         |        |              |               |               |                  |                |

10/12/15  
MFD  
10-12-15

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
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| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

Monday, December 06, 2010 8:17:14 AM

Page 1

Work Order ID: 64414

Parent Item: D3646-3

Parent Item Name: Arm



Start Date: 12/6/2010

Required Date: 12/13/2010

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP Rev. A new issue 07.07.25 EC verified by:JLM

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| M304TR0.500W.035                |                        | Purchased     | No          |                     |                  | 110             | f                  | 116.2609       | 2.91        | 30.63158     |               |                |        |
|                                 |                        |               |             |                     |                  |                 |                    |                |             |              |               |                |        |
| 304 RD Tube .500 x .035W        |                        |               |             |                     |                  |                 |                    |                |             |              |               |                |        |

Location

Loc Qty

Loc Code

MAT

116.2608934

114482

0.002677

115180

0.93405

115593

10.99364

115990 ✓

104.330526

MAT014

0.00002

114356

0.00002

M-L 10/12/09

30.63158

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

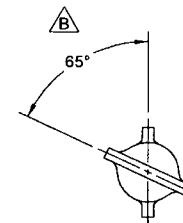
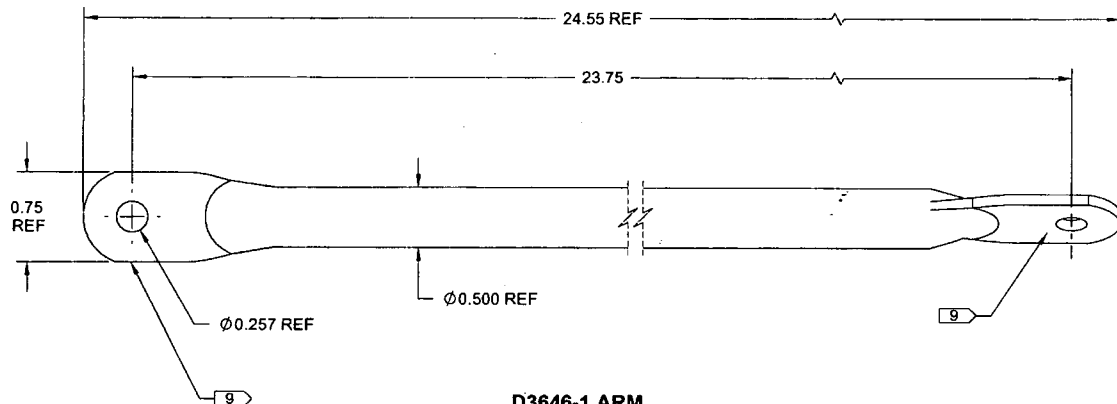
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 04414  
P1012-6



**D3646-1 ARM**

**RELEASED**  
09/06/23

**NOTES:**

- 1) MATERIAL: AISI 304/316 SS TUBE  $\phi 0.500 \times 0.035$  WALL PER ASTM A213/A269 OR ASME A213 (REF DART SPEC. M304TR0500W.035)
- 2) FINISH: POWDER COAT "BLACK SANDTEX" (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3646-1" USING REMOVABLE TAG
- 7) WEIGHT: 0.38 lbs
- 8) MAKE PER TEMPLATE DT8958
- 9) PUNCH BOTH ENDS PER SPEC CONTROL DWG D2727

|            |   |  |              |
|------------|---|--|--------------|
| B          | REFORMAT DWG, ANGLE 65° WAS 45° (ZN C3-1), ADD IDENTIFICATION TAG (ZN A8-1, A8-2) | CP   | 09.06.04     |
| A          | NEW ISSUE   | MB   | 07.06.06     |
| REV.       | DESCRIPTION   | BY   | DATE         |
| DESIGN     |   | <b>DART AEROSPACE LTD</b>  |              |
| DRAWN      |   | HAWKESBURY, ONTARIO, CANADA  |              |
| CHECKED    |   | DRAWING NO.  | REV. B       |
| MFG. APPR. |   | D3646  | SHEET 1 OF 2 |
| APPROVED   |   | TITLE  | SCALE        |
| DE APPR.   |   | ARM  | NTS          |
| DATE       | 09.06.04  | COPYRIGHT © 2007 BY DART AEROSPACE LTD<br>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. |              |

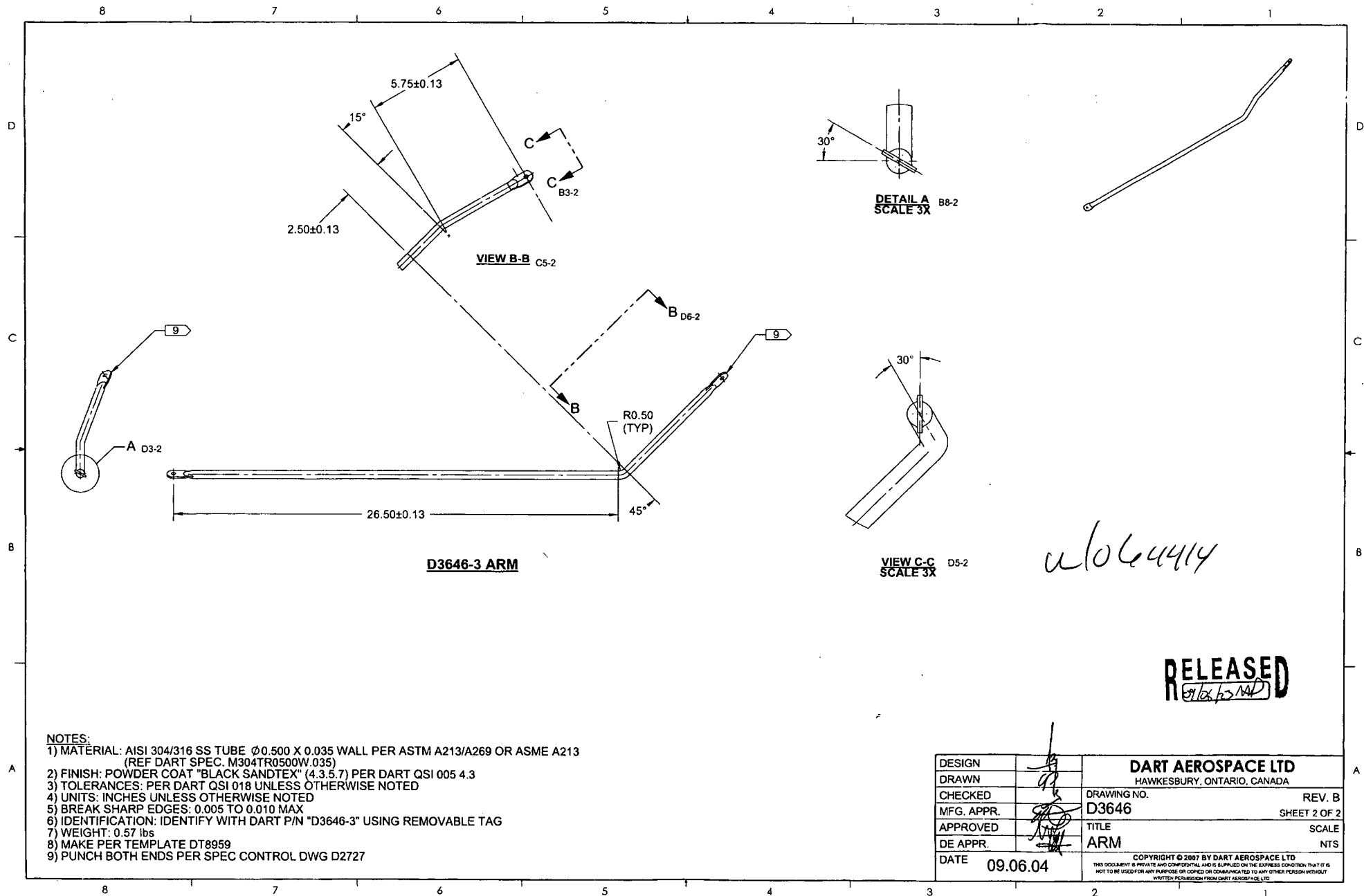
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|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

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|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
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|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries